REMARKS

Claims 1-39 were pending in the application. Claims 1, 13, and 26 have been amended. No new subject matter has been added to the claims. Accordingly, claims 1-39 remain pending after entry of the present amendment.

35 U.S.C. § 102 and § 103 Rejections

In the present Office Action, claims 1-5, 7, 9-12, 13-19, 21-25, 26-36, and 38-39 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,195,680 (hereinafter "Goldszmidt"). Further, claim 6 is rejected under 35 U.S.C. § 103(q) as being unpatentable over Goldszmidt et al. in view of Krum (USP 6,6118,820). Still further, claims 8, 20, and 37 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Goldszmidt in view of U.S. Patent No. 6,249,801 (hereinafter Zisapel). Applicant respectfully traverses the above rejections and requests reconsideration in view of the following discussion.

The presently claimed invention is generally directed to a mechanism, system, and method for selecting a context from a pool of contexts for processing a data packet in a multi-streaming processor. Context selection is performed such that over a multitude of context selections, there is a balancing of load pressure on functional units housed within the multi-streaming processor and required for packet processing. In contrast, Goldszmidt states:

> "This invention relates generally to providing fault tolerance and load balancing for real-time data streaming. More particularly, it relates to a client-based dynamic server switching method for use **in a distributed system including multiple servers that are simultaneously transmitting one or more real-time multimedia streams**." (Goldszmidt, col. 1, lines 6-12, emphasis added).

Applicant submits that the presently claimed invention and the cited art are directed to different purposes. Applicant has amended claims 1, 13, and 26 to clarify the claimed

invention. A number of fundamental differences will be apparent as described in the following remarks.

Claim 1, as amended, now recites:

> "A context-selection mechanism for selecting a context from a pool of contexts for processing a data packet comprising:
>
> an interface for receiving a data packet and communicating with a multi-streaming processor, said multi-streaming processor hosting the pool of contexts;
>
> circuitry for computing input data into a value according to one or more logic rules and for selecting a context from the pool of contexts based at least in part on the value; and
>
> a loading mechanism for preloading packet information from the received data packet into the selected context for subsequent processing;
>
> characterized in that the computation of the input data functions to enable identification and selection of a context for processing the packet information according to the logic rule at the instant time such that a multitude of context selections made over a period of time facilitate balancing of load pressure on functional units housed within the multi-streaming processor and required for packet processing." (emphasis added).

It is noted that the recited loading mechanism is for preloading packet information from the received data packet into the selected context for subsequent processing. It is further noted that balancing of load pressure is accomplished via a multitude of selections over time of the context used to process the same packet information from the received data packets. At least these noted features are not suggested or taught by the cited art.

For example, in paragraph 2 of the present Office Action, the examiner suggests that Goldszmidt discloses all of the features of claim 1. In particular, the examiner suggests Goldszmidt discloses:

> "Goldszmidt discloses a context-selection mechanism for selecting a context (selecting a streaming server based on size, capacity,

> location/affinity, network connectivity and utilization rate, see col. 4, lines 26-67, col. 5, lines 1-3, 55-64 and Fig. 1a). from a pool of contexts (from a pool of clusters 1.5 and 1.6, Fig. 1a) for processing a data packet (for processing packet information via the Internet, see col.. 5, lines 23-49) comprising: and interface (client agent, Fig. 1a) for communicating with a multi-streaming processor (for communicating with server architecture, see elements 1.7, 1.8, Fig. 1a) said multi-streaming processor (server architecture, see element 1.7, Fig. 1a) hosting the pool of contexts (the pool of clusters of streaming servers, see element 1.2, 1.3, 1.5, 1.6, Fig. 1a); circuitry (control server 2.1, Fig. 1a) for computing input data into a result value according to logic rule (for computing number of connection streams to each streaming server, see col. 8, lines 44-54) and for selecting a context based on the computed value (for selecting a server based on the computed number of connection streams to each streaming server, see col. 8, lines 44-54); and a loading mechanism for preloading the packet information into the selected context (audio and video inputs are captured/converted from analog to digital form, compressed, and packetized at a capture station, and then stored in circular buffer queues contained in a reflector/streaming server, see col. 15, lines 14-43) for subsequent processing (for subsequent processing by the reflector, see col. 15, lines 29-43; reflector will later produce a new copy of the circular buffer queue for a connection to a new client station)."

Accordingly, the examiner equates Goldszmidt's client with the recited interface, Goldszmidt's packet information received via the Internet with the recited packet information that is preloaded by the loading mechanism, and Goldszmidt's capture station for capturing audio and video inputs with the recited loading mechanism for preloading the packet information into the selected context. However, as the amendment to claim 1 makes clear, the packet information that the loading mechanism preloads is packet information from the received data packet, which is in turn received from the interface. In contrast, Goldszmidt's audio and video are not received from the client, nor are they the same as Goldszmidt's packet information received via the Internet. Rather, the audio and video packets being processed by the reflector originate from the capture station. In particular, inputs are packetized in the capture station and then stored in the reflector. Accordingly, applicant finds no teaching or suggestion in Goldszmidt of "a loading mechanism for preloading packet information from the received data packet into the selected context for subsequent processing," as is recited in claim 1. For at least the

above reasons, claim 1 is patentably distinguishable from the cited art. Independent claims 13 and 26 are distinguishable for similar reasons, as are each of dependent claims 2-12, 14-25, and 27-39 since they include at least the features of the independent claims upon which they depend.

In addition to the above, the dependent claims recite additional features not disclosed or suggested by the cited art. For example, with respect to claim 7, it is suggested that:

> "Goldszmidt discloses the context selection mechanism of claim 5 wherein the input data into the computation circuitry further includes statistical data about previous processing time periods required to process similar data packets (the previous routing request or affinity data records stored at the control server are used by the control server to select a server to process a client request in accordance with these affinity data records, see col. 6, lines 40-60)."

However, the cited portion of Goldszmidt merely discloses:

> "… affinity is due to state at the servers either due to previous routing requests, or data affinity at the server" (Goldszmidt, col. 6, lines 44-45).

Neither "state at the servers" nor "data affinity at the servers" includes statistical data about previous processing time periods required to process similar data packets. Both state and affinity data records have to do with whether or not a particular server processed a particular packet, rather than how long a time period was required to process a packet. Accordingly, Applicant finds no teaching or suggestion in the cited art that "the input data into the computation circuitry further includes statistical data about previous processing time periods required to process similar data packets," as is recited in claim 7. For at least these additional reasons, claim 7 is believed to be patentable, as is claim 19 for similar reasons.

In view of the above, Applicant respectfully requests withdrawal of the rejections.

CONCLUSION

Applicant submits the application is in condition for allowance, and an early notice to that effect is requested.

Respectfully submitted,

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